

REMARKS/ARGUMENTS

The Office Action mailed October 4, 2004, has been received and reviewed. Claims 1 through 20 are currently pending in the application. Applicants affirm the election to prosecute the invention of Group I, claims 1 through 8. Claims 9 through 20 are withdrawn from consideration as being drawn to non-elected inventions. Claims 1 through 8 stand rejected. Applicants have amended claims 1, 2, 6, and 7, and respectfully request reconsideration of the application as amended herein.

Preliminary Amendment

Applicants' undersigned attorney notes the filing herein of a Preliminary Amendment on August 13, 2004, which filing was not acknowledged in the outstanding Office Action. Should the Preliminary Amendment have failed for some reason to have been entered in the Office file, Applicants' undersigned attorney will be happy to have a true copy thereof hand-delivered to the Examiner.

35 U.S.C. § 103(a) Obviousness Rejections

Obviousness Rejection Based on U.S. Patent Application Publication No. 2003/0186003 A1 to Nakano et al.

Claims 1 through 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakano et al. (U.S. Patent Application Publication No. 2003/0186003 A1). Applicants respectfully traverse this rejection, as hereinafter set forth.

M.P.E.P. 706.02(j) sets forth the standard for a Section 103(a) rejection:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, **the prior art reference (or references when combined) must teach or suggest all the claim limitations.** The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (Emphasis added).

Amended independent claim 1 is drawn to a print medium comprising an ink-receiving layer and a coated, absorptive paperbase, the ink-receiving layer present on the

coated paperbase from about 3 grams per square meter to about 7 grams per square meter, and the coated paperbase having a Sheffield smoothness less than approximately 20 and a Sheffield porosity less than approximately 10. As described in paragraph 26, Tables I and II, and the Examples of the instant application, images printed on the print medium of the present invention exhibit a number of advantageous properties that are observed when using the particular range of coatweights of ink-receiving layer in combination with a coated, absorptive paperbase having specific smoothness and porosity. In contrast, Nakano et al. does not teach or suggest the particular ranges of ink-receiving layer and coated, absorptive paperbase required in claims 1-8.

As acknowledged by the Examiner, Nakano et al. does not teach or suggest a coating weight for the ink-receiving layer. Instead, it generally states that a thickness in the range of 10 to 50 micrometers is desirable and goes on to state that the thickness of the ink-receiving layer should be adjusted so that the layer has sufficient absorption capacity to absorb all of the ink applied thereto. (Office Action at pg. 2). Also acknowledged is the fact that Nakano et al. does not teach or suggest the porosity and smoothness of the coated paperbase, as required in claims 1-8. In support of this contention, it is suggested that resin-coated papers have no porosity and that Nakano et al. discloses that supports used therein are highly glossy. However, such general statements do not provide one of ordinary skill in the art sufficient guidance to make the present invention with all of its combined limitations and amount to, at best, no more than hindsight reconstruction. In particular, general statements advising the reader to adjust the thickness of the ink-receiving layer amount to no more than an invitation to experiment with thickness layers to ascertain absorption qualities and the effect of the same on print quality. More significantly, such general statements, without more specific guidance, description, or observable test results, do not provide a reasonable expectation of success.

In contrast, the present application specifically discloses a particular range of coatweight that provides improved print properties. The contention in the Office Action that resin-coated papers have no porosity is likewise misplaced, as the claims and the description in the specification of the application are not limited to print mediums having a resin-coated paperbase. In fact, paperbase materials exhibiting varied porosity are described. Likewise, the general statement in Nakano et al. regarding use of photographic quality resin-coated papers provides no guidance to one of ordinary skill in the art as to the particular smoothness and

porosity level needed in the paperbase, in combination with the coatweight of the ink-receiving layer, to obtain the print medium of claims 1-8. In view of the foregoing, Applicants believe that the 35 U.S.C. § 103(a) obviousness rejections of claims 1-8 are improper because a *prima facie* case of obviousness has not been proven and respectfully request that the rejections be withdrawn.

Obviousness Rejection Based on U.S. Patent Application Publication No. 2003/0186003 A1 to Nakano et al. and Further in View of U.S. Patent No. 6,780,924 to Shih et al. or Applicants' Admissions at Paragraph [0014] of the Specification

Claims 1, 3, and 4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakano et al. (U.S. Patent Application Publication No. 2003/0186003 A1), as applied to claims 1, 3, and 4 above, and further in view of Shih et al. (U.S. Patent No. 6,780,924) or Applicants' admissions at paragraph [0014] of the specification. Applicants respectfully traverse this rejection, as hereinafter set forth.

Shih et al. is relied upon as disclosing colloidal dispersion silica in a composition for a printable medium. Alternatively, Applicants are said to admit that cationic colloidal silica dispersions are commercially available. As previously discussed, Nakano et al. does not teach or suggest a print medium comprising an ink-receiving layer and a coated, absorptive paperbase, the ink-receiving layer present on the coated paperbase from about 3 grams per square meter to about 7 grams per square meter, and the coated paperbase having a Sheffield smoothness less than approximately 20 and a Sheffield porosity less than approximately 10. Shih et al. does not teach or suggest the elements of claims 1-8 and does not overcome the lack of teaching or suggestion in Nakano et al., for the same reasons stated above. Likewise, Applicants' description of commercially known materials does not overcome the lack of teaching or suggestion in Nakano et al. As such, Applicants believe that the 35 U.S.C. § 103(a) obviousness rejections of claims 1-8 are improper because a *prima facie* case of obviousness has not been proven and respectfully request that the rejections be withdrawn.

Obviousness Rejection Based on U.S. Patent Application Publication No. 2003/0186003 A1 to Nakano et al. and Further in View of U.S. Patent Application Publication No. 2001/0004487 A1 to Kaneko et al.

Claims 1 through 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakano et al. (U.S. Patent Application Publication No. 2003/0186003 A1), as applied to claims 1 through 8 above, and further in view of Kaneko et al. (U.S. Patent Application Publication No. 2001/0004487 A1). Applicants respectfully traverse this rejection, as hereinafter set forth.

Kaneko et al. is relied upon as teaching an ink jet recording medium with a preferred support of resin-coated paper. As previously discussed, Nakano et al. does not teach or suggest a print medium comprising an ink-receiving layer and a coated, absorptive paperbase, the ink-receiving layer present on the coated paperbase from about 3 grams per square meter to about 7 grams per square meter, and the coated paperbase having a Sheffield smoothness less than approximately 20 and a Sheffield porosity less than approximately 10. Kaneko et al. likewise does not teach or suggest the elements of claims 1-8 and does not overcome the lack of teaching or suggestion in Nakano et al., for the same reasons stated above. As such, Applicants believe that the 35 U.S.C. § 103(a) obviousness rejections of claims 1-8 are improper because a *prima facie* case of obviousness has not been proven and respectfully request that the rejections be withdrawn.

Claims 6 and 7 – Antecedent Basis

The Examiner notes that claims 6 and 7 appear to have improper antecedent basis and seeks clarification. Claims 6 and 7 have been amended to depend from claim 3. In view of the foregoing, Applicants respectfully request that the rejection be withdrawn.

ENTRY OF AMENDMENTS

The amendments to claims 1, 2, 6, and 7 above should be entered by the Examiner because the amendments are supported by the as-filed specification and drawings and do not add any new matter to the application.

CONCLUSION

Claims 1-8 are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Examiner determine that additional issues remain which might be resolved by a telephone conference, he is respectfully invited to contact Applicants' undersigned attorney.

Respectfully submitted,



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